Prepared By: EA Engineering, Science, and Technology, Inc.

Final Prepared: 1/4/10

### **GUDE LANDFILL REMEDIATION**

## **GLCC/DEP MEETING NO. 5**

DATE:

November 12, 2009

TIME:

7:30 PM to 9:00 PM

LOCATION:

Montgomery County Transfer Station

#### ATTENDANCE:

Name	Organization	Designation
Dean Dozier	Gude Landfill Concerned Citizens (GLCC)	Member
Dave Peterson	Gude Landfill Concerned Citizens (GLCC)	Member
Keith Ligon	Gude Landfill Concerned Citizens (GLCC)	Member
Nick Radonic	Gude Landfill Concerned Citizens (GLCC)	Member
Julia Tillery	Gude Landfill Concerned Citizens (GLCC)	Member
Peter Karasik	Montgomery County Dept. of Env. Protection (DEP)	Section Chief
Steve Lezinski	Montgomery County Dept. of Env. Protection (DEP)	Engineer III
John Kumm	EA Engineering, Science, and Technology, Inc. (EA)	DEP Consultant

The Meeting Agenda is included as Attachment 1.

Contact information for attendees is included as Attachment 2.

#### MINUTES:

- Steve Lezinski of DEP requested final comments on the draft minutes from GLCC/DEP Meeting No. 4 on September 10<sup>th</sup> and the Community Meeting on September 24th. GLCC indicated that the minutes were acceptable. Steve Lezinski stated that minutes for both meetings would be finalized and posted on the website.
- Steve Lezinski asked if there had been any feedback from attendees at the Community Meeting. Keith Ligon of GLCC commented that there was no direct feedback regarding the meeting. However, Keith Ligon did state that many of the meeting attendees and Derwood Community residents are original home owners, whom remember the developer's assurances that the adjacent landfill would be converted to a park. One resident e-mailed GLCC to suggest using part of the landfill surface for a photovoltaic solar array.
- Dave Peterson of GLCC asked if there was a database or clearing house of closed landfill reuse options. DEP and EA agreed to conduct a search and apprise GLCC of available resources.
- 4) Dave Peterson asked about the hiking trails at the Oaks Landfill. Peter Karasik of DEP stated that they had been developed cooperatively with the Maryland-National Capital Park and Planning

Commission (M-NCPPC).

- 5) Keith Ligon suggested that the next Community Meeting be held in the second quarter of 2010.
- 6) GLCC asked if groundwater sampling results as part of the Nature and Extent Study results would be available for the next Community Meeting. Peter Karasik stated that since multiple rounds of sampling would be conducted, ground water data and conclusions would likely not be available until May 2010. However, some initial sampling of surface water and surface soils can be done in the near future, prior to development of the new groundwater wells.
- Dean Dozier of GLCC asked how deep the shallow and deep groundwater sampling wells would be. John Kumm of EA replied that the shallow wells would be about 25 feet below the top of the groundwater table, and the deep wells would be 50 to 70 feet below the top of the groundwater table. Dean Dozier recommended the installation of temporary geo-probes for monitoring instead of permanent wells (initially) because they would be less intrusive from a disturbance standpoint and have a lower cost.
- Steve Lezinski stated that DEP is waiting for responses from MDE concerning the test results at the two springs north of the site, and at the seeps on the northwest slope. Peter Karasik explained that the seeps occur when leachate percolates to a less permeable layer like cover material and then migrates horizontally to the side slopes where, it can become a seep. Dean Dozier asked about cover soil practices during the operation of the landfill. Mr. Karasik stated that actual landfill operations predated current DEP staff, but according to previous employees who recollect operations at that site, cover soil was used daily and between lifts. Julia Tillery asked why the DEP would not just proceed with mitigating the seeps. Steve Lezinski stated that DEP would like to receive MDE's comments on the sampling data and concurrence on an interim remedial approach as it would entail a large scale repair with considerable expenditure.
- 9) Steve Lezinski stated that the aerial photography had been completed and some of the aerial views would be posted on the project website.
- Steve Lezinski stated that the bronze plates for the permanent property corner markers were installed and that the remaining site features such as groundwater wells, landfill gas pipes, and stormwater structures are continuing to be surveyed.
- 11) Steve Lezinski summarized the waste delineation activities, including the test pitting and surveying, indicating that waste extended beyond the landfill property line onto M-NCPPC land. John Kumm presented a site plan showing the location of the test pits and the identified extent of the waste, as well as two historical aerial views of the landfill showing apparent waste filling on the M-NCPPC property. Copies of the test pitting plan and aerial views are included at Attachment 3.
- 12) John Kumm stated that the field activities associated with identifying the applicable protected natural resources (wetlands, forest stand delineation, etc.) was completed. He presented a brief summary of the activities and findings. A copy of the summary is included at Attachment 4. The

protected natural resources will be further investigated with the governing Agencies in future phases of the Remediation project.

- 13) Steve Lezinski stated that EA's proposal for the Phase 1 of the Nature and Extent Study submitted on September 10, 2009 was approved by the County on September 30, 2009.
- 14) John Kumm presented three aerial views of the landfill showing locations of existing and proposed new groundwater sampling wells, existing and proposed new surface water sampling points, and proposed surface soil sampling points. Three of the eighteen new groundwater wells have proposed locations along the border between the Derwood Community and the natural gas pipeline right of way. Nick Radonic of GLCC offered to look into the community plan and property plats to determine if there is HOA common land on the right of way side suitable for the new wells. GLCC would prefer that the wells be temporary, but multiple sampling events in each well over a period of months may make installing permanent wells more cost effective.

Three new locations for collection of surface water samples are proposed: the two stormwater outfalls on the southeast side and in an intermittent stream bed on the M-NCPPC land. It was also proposed that surface water samples be collected at the two springs just north of the landfill property, one on the property and one just off the property.

Dean Dozier asked if Biochemical Oxygen Demand (BOD) and Chemical Oxygen Demand (COD) could be included among the tests for surface water samples. Peter Karasik stated that he did not believe that the data would necessarily be related to the landfill; however, he agreed to consult David Lake who oversees DEP's groundwater and surface water monitoring programs.

Surface soil samples are proposed at several locations both on and off the landfill property. Most of these will be grab samples. A composite sample is proposed for the area on top of the landfill. Soil samples will be analyzed for semi-volatile organic compounds and metals. Volatile organic compounds are not expected to be detected in the surface soil due to evaporation. It was suggested that soil samples be analyzed for total hydrocarbons (THC), rather than the groundwater/surface water analytes, to reduce costs. EA recommended analyzing for the individual chemicals to enable proper comparison with other samples from the site.

Copies of three aerial views showing the proposed sampling locations that were discussed during the meeting are included as Attachment 5. These aerial views are in draft form and may be revised based on additional project discussions.

- 15) Steve Lezinski stated that the dioxin/furan testing on the enclosed flare at Gude was completed between 11/2 and 11/6. Testing of the Jenbacher engines at Gude and Oaks had to be postponed due to operational and sampling equipment difficulties. Dean Dozier stated that due to the difference in landfill gas characteristics at the two landfills, he felt it was more important to test the Gude engine than the Oaks engine when the testing is rescheduled.
- 16) Dave Peterson asked how many of the chemical analytes are confirmed carcinogens. EA will

- provide a list of which chemicals are carcinogens.
- 17) Steve Lezinski stated that GLCC comments on the remediation webpage were received and have been forwarded to the DSWS webpage manager for review and incorporation.
- 18) GLCC/DEP meetings will continue to be held on the second Thursday of each month. A meeting will not be held in December. The next meeting will be held on Thursday, January 14, 2010 from 7:30 to 9:00 PM at the Transfer Station.

### **Action & Follow-up Items**

- 5-01 DEP and EA to research the existence of a comprehensive database for closed landfill reuse options.
- 5-02 GLCC to schedule next Derwood Community Meeting; second quarter 2010.
- 5-03 DEP to contact MDE regarding the spring and northwest slope surface water sampling, and leachate seeps repairs on northwest slope.
- 5-04 DEP to post the recent aerial survey of the Gude Landfill on the Remediation project website.
- 5-05 DEP to evaluate if Biochemical and Chemical Oxygen Demand (BOD/COD) can be included for analysis purposes as part of the Gude Landfill surface water monitoring program.
- 5-06 DEP to reschedule the dioxin/furan testing of the Gude Landfill gas-to-energy engine.
- 5-07 EA to provide a list of the chemical analytes that were detected in the Gude Landfill groundwater/surface water monitoring results that are carcinogens.

The above summation is the writer's interpretation of the items discussed at the meeting. Comments involving differences in understanding of any of the meeting items will be received for a period of thirty (30) days from the date of these meeting minutes. Clarifications will be made, as deemed necessary. If no comments are received within the specified time period, the minutes will remain as written.

## Gude Landfill Remediation Gude Landfill Concerned Citizens Monthly Meeting No. 5

## Meeting Agenda

- 1. Review and Approval of GLCC/DEP Meeting Minutes (Meeting No. 4)
- 2. Open Discussion of 9/24/09 Community Meeting
  - a. General perceptions, areas of improvement, action items, etc.
  - b. Review and Approval of Community Meeting Minutes (Meeting No. 4.1)
- 3. Update on Previous Agenda Items
  - a. Sampling DEP awaiting MDE response on Springs and N.W. Slope sampling.
    - The Areas of Concern as previously identified along the N.W. Slope are still prominent with recent rain events and DEP is awaiting guidance from MDE on corrective measures.
  - b. Phase 0 Aerial Mapping, Field Survey, and Waste Delineation
    - Aerial Mapping Completed and final prints ordered.
    - Field Survey Bronze plates for permanent monuments installed and site features (groundwater wells, landfill gas pipes, stormwater structures, etc.) continue to be surveyed.
    - Waste Delineation Utility survey completed, 161 test pits completed on landfill property, and draft report prepared for County review. Approximately 56 test pits indicated that waste may be located beyond property boundary; primarily along M-NCPPC property. Brief review of former aerial surveys of the landfill site.
    - ♦ M-NCPPC Construction Access Permit On-site meeting with M-NCPPC on 9/15/09, M-NCPPC permit approval on 9/21/09, test pit locations approved on 10/2/09, and 14 test pits completed on M-NCPPC property. Testing pitting indicates waste is located beyond property boundary along portions of the eastern boundary of site on M-NCPPC land and potentially several locations on WSSC property.
  - c. <u>Phase 1 Nature and Extent Proposal</u> EA Engineering submitted the final proposal on 9/10/09. County approval on 9/30/09.
    - Groundwater & Soil Sampling on-site and off-site sampling to be requested. Discussion with Community.

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# Gude Landfill Remediation Gude Landfill Concerned Citizens Monthly Meeting No. 5

## **Meeting Agenda**

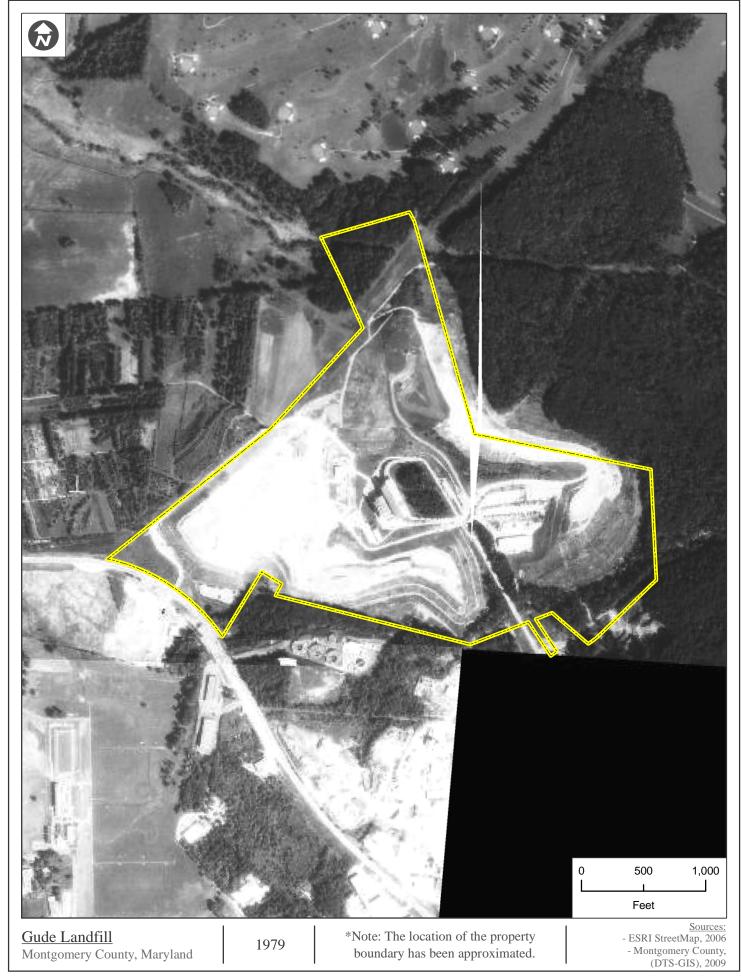
d. <u>Landfill Gas-to-Energy Plant and Flare Station</u> – Dioxin/Furan testing of the enclosed Flare began and was completed during the week of 11/2-11/6/09. Testing of the Jenbacher Engine was postponed to a future date due to operational and sampling equipment difficulties. Engine testing will occur at the Gude or Oaks Landfill, as both Gas-to-Energy facilities utilize the Jenbacher Engine.

## 4. Remediation Webpage

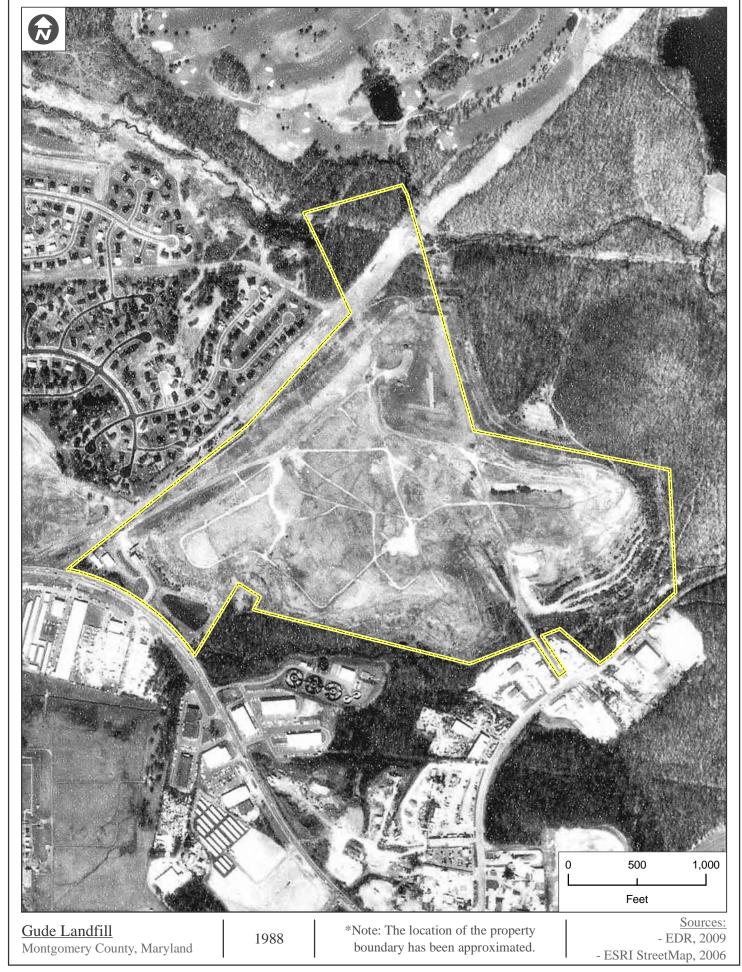
- a. Received comments via email from Bob Day on 11/9/09.
- b. Comments forwarded to DSWS Webpage manager for review and incorporation.
- c. <a href="http://www.montgomerycountymd.gov/swstmpl.asp?url=/content/dep/solidwaste/facilities/gude/index.asp">http://www.montgomerycountymd.gov/swstmpl.asp?url=/content/dep/solidwaste/facilities/gude/index.asp</a>
- 5. Next Meeting/Action Items

Date	Date November 12, 2009
Time	Time 7:30 -9:00 PM
Meeting	Meeting Gude Landfill Remediation: GLCC/DEP

Name	Affiliation	Phone	Email	Address
Stephen lezinski	050	0359-666-04B	Steve. Lezinski. © mol. gov	1610 I Fredorick Kal Derwood MD 20855
Dave Peterson	GICC	301-921-6357	Empodhp @ hotmarl, com	7612 Aramosa Way Democol, MD 20ESS
Julia Tillen	22760	202.329-8740	202.329-8740 julia@Tilley office.com	15461 Indianola Dr. 20855
Peter Karasik	DEP	6959-EEE-0HZ	peter, Karasike montgonery countyme, gov	16101 Frederick Demond, MD
KEIN LIGON	Stee	301 3003 35g		Johnson Monte
Dan Bork	GLCC	694216012	2499/24 40 NE 40 NO/COM	16 13 40/4/W54 WAR
Wich Radonia	11	2408888640		15408 Indienday
John Kumm	EA Engineerny	1415-328-09h	410-329-SIYI j Kumm Occession	Sloveber Circle Farks NTD 21152
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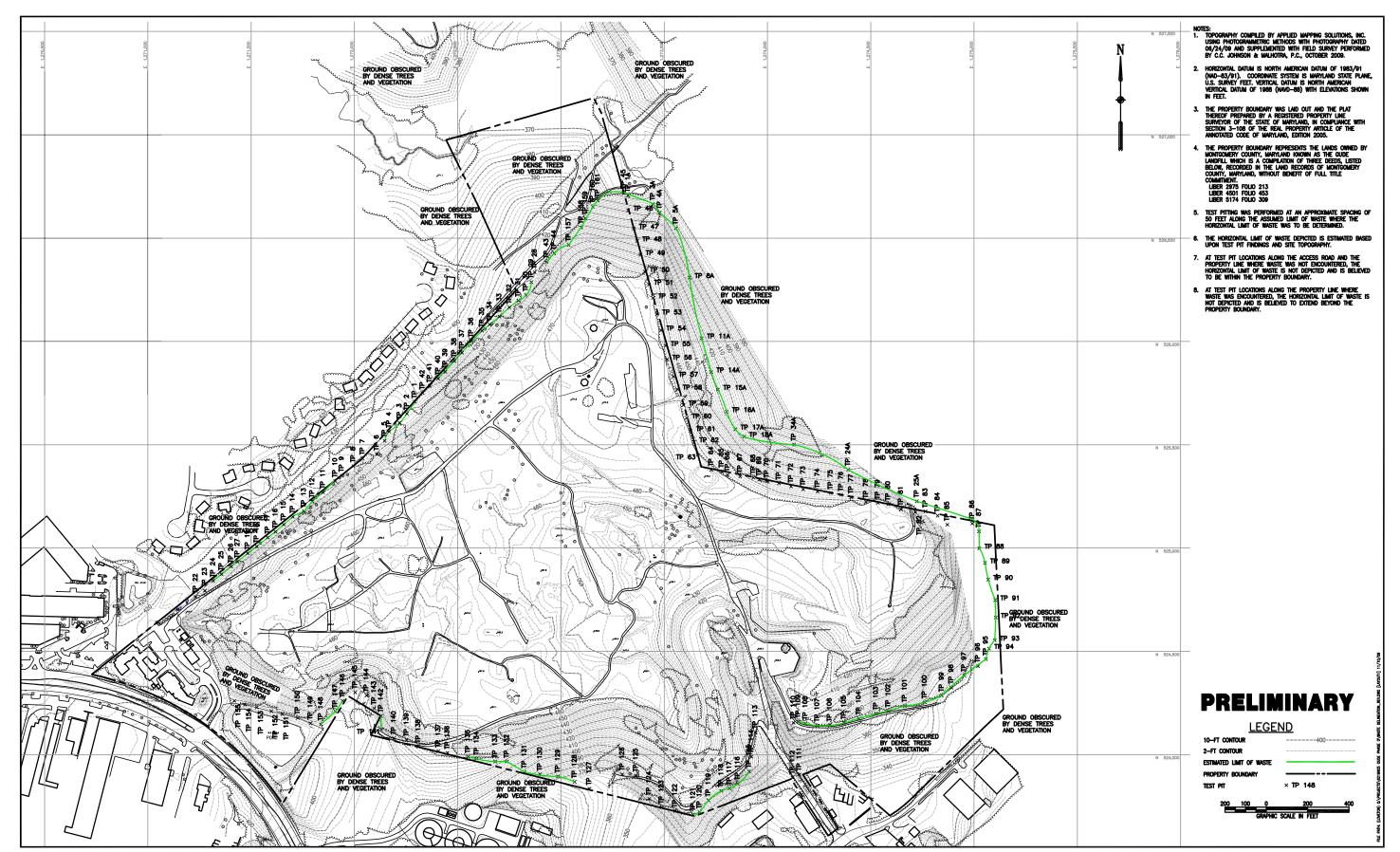


Figure 1. DRAFT GUDE LANDFILL WASTE DELINEATION



## Gude Landfill Remediation Nature and Extent Study Protected Natural Resource Investigations

### **PURPOSE**

- Identify and locate protected natural resources such as streams, wetlands, forest stands, rare, threatened & endangered species, and historic properties or structures, that have the potential to be impacted during future remediation activities.
- Findings will be evaluated during the planning stages for remedial design in order to avoid/minimize impacts to these protected resources to the greatest extent practicable.
- When impacts cannot be avoided entirely, the results of the investigation will be utilized
  to accurately document and account for such impacts, to obtain approval from the
  appropriate regulatory agencies (ie. MDE, USACE, MDNR, USFWS).

#### SCOPE

#### **Wetland Delineation**

- Reviewed base survey mapping; digital GIS mapping and resource layers; recent and historic aerial photographs; DNR's Wetland Guidance Maps and USFWS National Wetland Inventory maps; USGS topographic quadrangles; NRCS soil surveys; vegetation and geologic mapping; previous studies and reports; and FEMA maps.
- Conducted a wetland delineation in accordance with the methodologies outlined in the <u>U.S. Army, Corps of Engineers Wetland Delineation Manual</u> (Environmental Laboratory, 1987).
- Wetland and stream boundaries were flagged in the field and located using a GPS unit for future mapping.
- A wetland delineation report that includes all information required by the U.S. Army Corps of Engineers (COE) for jurisdictional determinations (JDs) is being prepared for future submittal.
- This wetland delineation is the preliminary step to obtain a jurisdictional determination or submit a permit application which may be required for the actual remediation.

## Forest Stand Delineation / Agency inquiry letters

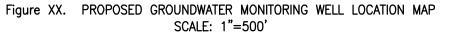
- Activities requiring an application for a subdivision, grading permit or sediment control
  permit on areas greater than 40,000 square feet (approximately 1 acre) or activities that
  clear more than 40,000 square feet of forest, require a Forest Stand Delineation (FSD) in
  accordance with the Forest Conservation Act (FCA).
- The forested area within the landfill site was assessed in order to conduct a forest stand delineation as described in the Maryland's FCA.
- The FSD was completed by a Certified Qualified Professional and was performed in accordance with the Montgomery County Approved Technical Manual (1992), as well as the Maryland State Technical Manual (1997).
- FSD field efforts included the location, description, and size of forest stands located onsite and directly adjacent to the site.

## Gude Landfill Remediation Nature and Extent Study Protected Natural Resource Investigations

- EA personnel also identified locations of any priority forest retention areas, as well as afforestation areas located outside of existing forest areas.
- The Location of all identified Specimen Trees will be flagged in the field and GPS located during the site visit.
- EA will complete a written summary of the natural resources and forest stand conditions on-site and include information gathered during the field efforts.
- In addition, the FSD Report will include written inquiries to the Fish and Wildlife Service (FWS), and MD-DNR, regarding whether they are aware of any records of rare, threatened or endangered species present within the project boundary, as well as, written inquiry to the Office of Preservation and Compliance, Maryland Historical Trust (MHT) to determine whether there are any know occurrences of historical, cultural, and/or archeological sites/features present at the site.
- The FSD is the preliminary step to preparing a Forest Conservation Plan (FCP), which
  may be required for the remediation project, depending on the chosen remediation
  approach.

### SUMMARY OF FINDINGS TO DATE

- All field work required for these investigations is complete at this time.
- The resource survey maps and summary reports for the FSD and wetland delineation are being drafted.
- EA identified a system of stream channels and adjacent wetlands located in the forested
  portions of the project site, along the property boundaries. The majority of the aquatic
  resources appear to be located outside of the Gude Landfill property, but in close
  proximity to it.
- If remedial activity is required in these areas, a permit will likely be required from the USACE and MDE for potential impacts to these resources.
- EA identified small pocket depressions within the boundary of the cleared landfill area which are likely to be considered non jurisdictional wetlands and may not require a permit for future impacts.
- Similar to the wetland delineation, the FSD identified the majority of the forest stands along the property boundaries. The majority of these resources appear to be located outside of the Gude Landfill property, but in close proximity to it.
- If remedial activity is required in these areas, a Forest Conservation Plan will likely be required by Montgomery County, for impacts on these resources.





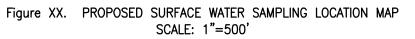




Figure XX. PROPOSED SURFACE SOIL SAMPLE LOCATION MAP SCALE: 1"=500'



**DRAFT**